REMARKS

Claims 1-13 and 15-25 are pending in the application.

By the foregoing Amendment, claim 7 is amended. Claim 14 is cancelled without prejudice or disclaimer. New claim 25 is added.

Claim 7 has been amended to recite that the emitter/detector element pairs are "complementary," in order to better define the invention relative to the prior art.

These changes are believed not to introduce new matter, and entry of the Amendment is respectfully requested.

Based on the above Amendment and the following Remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections, and withdraw them.

Allowable Subject Matter

Applicant thanks the Examiner for his indication that claims 15-24 are allowed.

Objection to the Claims

On page 2 of the Office Action, claim 1 was objected to because of the lack of a colon following "comprising." This objection is respectfully traversed. Claim 1 is written as a single paragraph, and it is respectfully submitted that a colon following "comprising" is not necessary.

Rejections under 35 U.S.C. § 102

On page 2 of the Office Action, claims 1, 4, 7-9, 12, and 14 were rejected under section 102(b) as being anticipated by Simonsen et al. ("Simonsen"). The rejection is traversed as to claims 1 and 4, and is be overcome as to claims 7-9, and 12 by the amendment to claim 7, as being based on a reference that does not teach or suggest the claimed invention. The rejection is overcome as to claim 14 by its cancellation.

Claim 1 recites two pairs of complementary emitter and detector elements, and amended claim 7 recites a complementary sensing emitter/detector element pair and a complementary normalizing emitter/detector element pair. In a complementary emitter/detector pair, the emitter and detector work together, the detector receiving an anticipated wavelength that is emitter specific because the detector is calibrated to the emitter. That is to say, the emitter emits a specific wavelength and the detector is calibrated to "see" only that wavelength. not in spec p.6, 9 + cl 2

Simonsen does not teach or suggest the use of complementary emitter-detector pairs. On the contrary, Simonsen teaches the very opposite, that in Simonsen's invention, matching the detector to the emitter is unnecessary. See, for example, column 7, lines 36-41:

> With the invention no narrow-band measurement is necessary, because of the minimal dependence on the measurement wavelength. Inexpensive semiconductor light emitters (in particular, light-emitting diodes) can therefore be used without the need for additional measures for selecting the wavelength on the primary side or the secondary side.

It is therefore respectfully submitted that the invention as recited in claim 1 and amended claim 7, and in claims 4, 8, 9, and 12 depending therefrom is not anticipated by Simonsen, and that the rejection should be withdrawn.

Rejections under 35 U.S.C. § 103

On page 3 of the Office Action, claims 2, 3, 5, 6, 10, 11, and 13 were rejected under section 103(a) as being unpatentable over Simonsen in view of Kaffka et al. ("Kaffka"). This rejection is traversed with respect to claims 2, 3, 5, and 6, and is overcome with respect to claims 10, 11, and 13 by the amendment of claim 7, as being based upon references that, either alone or in combination, do not teach or suggest the claimed invention.

In the Office Action, it was stated that "Simonsen et al do not teach a silicon detector." Kaffka was therefore cited as teaching "that a silicon detector offers satisfactory performance to measure blood glucose." As Simonsen teaches the use of light-emitting diodes or other semi-conductor light sources (see column 5, lines 35-40), and as it is well-known that LED's and other light-emitting semi-conductor devices are commonly made with silicon, Kaffka's; so the citation of Kaffka with respect to the limitations of claims 2, 3, 5, 6, 10, 11, and 13 is somewhat beside the point.

More significant is the fact that none of the cited prior art teaches the "complementary" limitation of claim 1 and amended claim 7, from which claims 2, 3, 5, 6, 10, 11, and 13 depend. As discussed above with respect to the rejection of claims 1 and 7, Simonsen does not teach complementary emitter/detector pairs. Kaffka also does not teach this limitation. On the contrary, Kaffka teaches two pairs of emitter/detector pairs, in which the first emitter emits radiation at a wavelength that can be varied in a range between 740-1060 nm and the second emitter emits radiation at a wavelength that can be varied in a range between 1060-1800 nm. Accordingly, the first detector detects light across the entire range of wavelengths that can be emitted by the first detector,

and the second first detector detects light across the entire range of wavelengths that can be emitted by the second detector. While each of Kaffka's emitters emit monochromatic radiation at any given time, they are adjustable to emit radiation over their entire ranges. Therefore, their corresponding detectors must be able to detect radiation over their entire emission range. This type of breadth in emitter-detector pairs precludes their being complementary.

Because neither Simonsen nor Kaffka teaches emitter-detector pairs that are "complementary" as required by claims 1 and 7, they cannot teach the invention as recited in claims 2, 3, 5, 6, 10, 11, and 13 depending from claims 1 and 7. The invention as recited in claims 1 and 7 therefore is patentable over Simonsen and Kaffka, either alone or in combination; and claims 2, 3, 5, 6, 10, 11, and 13 depending therefrom are therefore also patentable over Simonsen and Kaffka. Accordingly, it is respectfully requested that the rejection of claims 2, 3, 5, 6, 10, 11, and 13 be withdrawn.

Conclusion

All objections and rejections have been complied with, properly traversed, or rendered moot. Thus, it now appears that the application is in condition for allowance. Should any questions arise, the Examiner is invited to call the undersigned representative so that this case may receive an early Notice of Allowance.

Favorable consideration and allowance are earnestly solicited.

Respectfully submitted,

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